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L					Application Number	10/708,356	
\$	PARTOR	RMATION	DISCL	.OSURE	Filing Date	2/26/2004	
I.	STATI	EMENT E	SY APP	LICANT	First Named Inventor	Hurd, Ralph E.	
UN	(يع 2004 ه	•			Group Art Unit	2862	
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1	A STATE OF	1	of	2	Attorney Docket Number	GEMS8081.187	

	Cite No.'	U.S. Patent Docu	ment.	Name of Patentee or Applicant of Cited Document	Date of Publication of	Pages, Columns, Lines,
Examiner Initials*		Number	Kind Code ² (if known)		Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear
B_		US 2003/016061 0	A1·	Van Zijl et al.	08-28-2003	
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Examiner tnitials*	Cite No. ¹	Office ³	Foreign Patent Doc.	ument Kind Code ⁵ (if knawn)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant	τ°
1		wo	03/049604	A2	The Johns Hopkins University School of Medicine	06-19-2003	Figures Appear	7
k		wo	03/050521	A1	The Johns Hopkins University School of Medicine	06-19-2003		
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^{*}EXAMINER: Initial If reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08A (08-00)

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Substitute	for form 1449B	J/PTO		Complete if Known		
				Application Number	10/708,356	
INFO	RMATION	N DISCL	OSURE	Filing Date	2/26/2004	
STAT	EMENT	BY APP	LICANT	First Named Inventor	Hurd, Ralph E.	
				Group Art Unit	2862	
(1	use as many sh	eets as nece	ssary)	Examiner Name	Unknown	
Sheet	2	of	2	Attorney Docket Number	GEMS8081.187	

OTHER PRIOR	R ART -	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite, No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
B		KREUTZER ET AL., "1H-nuclear magnetic resonance deoxymyoglobin signal as indicator of intracellular oxygenation in myocardium," <i>Am J Physiol.</i> (1991), p. H2091–97, 0363-6135/91.					
		KREUTZER ET AL., "Observing the Deoxy Hemoglobin Signal in Human Muscle as an Index of Vascular pO ₂ ," <i>Proc. Int. Soc. Magn. Reson. Med.</i> 77 (1998).					
		LUKIN ET AL., "Quaternary structure of hemoglobin in solution," PNAS (2003), p. 517–520, vol. 100, no. 2, available at www.pnas.org/cqi/doi/10.1073/pnas.232715799 .					
	`	MIHAILESCU ET AL., "A signature of the T → R transition in human hemoglobin." <i>PNAS</i> (2001), p. 3773–3777, vol. 98, no. 7, available at www.pnas.org/cgi/doi/10.1073/pnas.071493598 .					
		MOLE ET AL., "Myoglobin desaturation with exercise intensity in human gastrocnemius muscle, "Am J Physiol. (1999), p. R173–80, 0363-6119/99.					
		SIMPLACEANU ET AL., "Chain-Selective Isotopic Labeling for NMR Studies of Large Multimeric Proteins: Application to Hemoglobin." <i>Biophysical Journal</i> (2000), p. 1146–1154, Vol. 79(2).					
		TRAN ET AL., *Comparative analysis of NMR and NIRS measurements of intracellular PO₂ in human skeletal muscle." <i>Am J Physiol</i> (1999), p. R1682–1690, 0363-6119/99.					
		TRAN ET AL., "Spatial distribution of deoxymyoglobin in human muscle: an index of local tissue oxygenation." NMR Biomed. (1999;12:26–30), John Wiley & Sons, Ltd.					
		ZHOU ET AL., "Amide Proton Transfer Contrast for Imaging of Brain Tumors," <i>Proc. ISMRM</i> 11 (2003), p. 42.					
2		ZHOU ET AL., "Using the amide proton signals of intracellular proteins and peptides to detect pH effects in MRI," <i>Nature Medicine</i> (2003), p. 1085–90, vol. 9, no. 8.					

Examiner	B. Assel	7 Dat	ate	3/2	24/pc
Signature	mysm	/ Cor	onsidered		7/03

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